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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,224	04/23/2003	Hermann Renner	32301 W250	9213

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Smith Gambrell & Russell
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EXAMINER

JOHNSON, EDWARD M

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,224

Applicant(s)

RENNER, HERMANN

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,9 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 2,7,8 and 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1754

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3-6, 9, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB '294 in view of Clough '803.

Applicant claims a process for the regeneration of a supported or unsupported suspension catalyst based on at least one platinum group metal, comprising dissolution of the platinum group metals present in aqueous HCl, using an oxidizing agent for platinum group metals, filtration of insoluble constituents and precipitation of the platinum group metals by means of a reducing agent at a pH in the range from 2 to 10, characterized in that precipitation is carried out in the presence of a chelating agent for one or more metals from the series of metals of groups 2a, 3a, 4a, of the periodic system and transition elements.

Art Unit: 1754

Davies discloses a process for the recovery of at least one platinum group metal, such as palladium, platinum, or gold from catalysts, which are supported in finely divided form on a carrier by treating the catalysts in an aqueous medium of HCl and hydrogen peroxide, an oxidizing agent (see col. 1, lines 11-17). Davies continues to disclose carrying out a filtration step and a precipitation step of the platinum group metals (p. 2, col. 1, lines 6-23). The reducing agent is comprised of formaldehyde (p.2, col. 1, lines 45-47). However, Davies does not disclose utilizing the reducing agent at a pH in the range of from 2-10 and wherein precipitation is carried out in the presence of a chelating agent.

Clough teaches a process for recovering precious metals, such as platinum group metals (col. 1, lines 28-31). Clough continues to teach wherein the recovery of the metal is carried out using a chelating agent along with a transition metal, wherein the pH may be maintained within a range of from 1-10 (see col. 5, line 16-01. 6, line 39). The chelating agent may be citric acid, tartaric acid, as well as nitrilotriacetic acid (col. 5, lines 33-53).

Therefore, it would have been obvious to one of ordinal skill in the art, to modify the teachings of Davies, based on the teachings, by utilizing a chelating agent during

Art Unit: 1754

precipitation in the presence of a chelating agent for one or more metals from the series of metals of groups 2a, 3a, 4a, of the periodic system and transition elements, because Clough teaches a process for recovering precious metals, such as platinum group metals wherein the recovery of the metal is carried out using a chelating agent along with a transition metal, wherein the pH may be maintained within a range of from 1-10. Such modification would have been obvious to one of ordinary skill in the art, because one of ordinary skill in the art, would have expected a process for recovering platinum group metals, as taught by Clough, to have been similarly useful and applicable to a process for recovering platinum group metals, as taught by Davies.

With respect to claims 11-13, it would have been obvious to one of ordinary skill in the art to carry out a process with the precipitation of platinum group metals with a reducing agent comprised of formaldehyde being raised continuously or in stages, from 2-3 to 8-9, because Davies teaches using a formaldehyde reducing agent and Clough teaches wherein the pH may be varied between 1 to at least 10.

Allowable Subject Matter

3. Claims 2, 7-8, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten

Art Unit: 1754

in independent form including all of the limitations of the base claim and any intervening claims.

4. The following is a statement of reasons for the indication of allowable subject matter: Instant claims 2, 7, 8, and 10 are allowable over the cited prior art, because the cited prior art fails to disclose having an unsupported catalyst based on at least 50 wt.% of palladium, 0-50 wt.% of one or more other platinum group metals and 0.001% to 10 wt.% of at least one metal capable of forming complexes from the series of group 2a, 3a, 4a of the periodic system and transition metals without elements of the platinum group regenerated by carrying out precipitation in the presence of a chelating agent and one non-platinum group metal present.

Response to Arguments

5. Applicant's arguments filed 10/31/05 have been fully considered but they are not persuasive.

It is argued that it is of particular importance to note that the *Clough* process... the present application. This is not persuasive because the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.

Art Unit: 1754

See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

It is argued that note that when *Clough* uses the term... without the pretreatment. This is not persuasive because Applicant appears to admit that dissolving is disclosed Applicant merely claims dissolution in HCl. It is noted that the features upon which applicant relies (i.e., dissolution which does or does not "liberate") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that clearly, however, the combination of *Clough* with *Davies* would not motivate... the *Davies* procedure. This is not persuasive because the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, *Clough* teaches a process for recovering precious metals,

Art Unit: 1754

such as platinum group metals wherein the recovery of the metal is carried out using a chelating agent along with a transition metal, wherein the pH may be maintained within a range of from 1-10. Such modification would have been obvious to one of ordinary skill in the art, because one of ordinary skill in the art, would have expected a process for recovering platinum group metals, as taught by Clough, to have been similarly useful and applicable to a process for recovering platinum group metals, as taught by Davies.

It is argued that Clough discloses as an example... lines 30-68. This is not persuasive because Applicant does not claim a ligand that is not complexed to a metal. It is noted that the features upon which applicant relies (i.e., a ligand that is not complexed to a metal) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that a person skilled in the art understands... polydentate metal complex. This is not persuasive because Clough discloses chelating compounds (see column 4, lines 40-54) and, in any case, Applicant does not claim a polydentate metal complex forming compound. In response to applicant's argument

Art Unit: 1754

that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a polydentate metal complex forming compound) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

It is argued that the secondary reference of Clough teaches... element of the process. This is not persuasive because Applicant does not claim a metal free ligand (see *In re Van Geuns*, above).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


Art Unit: 1754

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edward M. Johnson
Primary Examiner
Art Unit 1754

